2012-2016 Community Health Improvement Plan for Routt & Moffat Counties

# **Table of Contents**

Introduction Background, Process, and Purpose	
Community Profile	5
Population, age, and percent growth	6
Race, ethnicity, and language	7
Poverty	7
Highlights from the 2011 Community Health Assessment Self-Perceptions of Individual Health	
Fair to poor health	8
Number of poor physical and mental health days in past month	9
Oral Health	9
Oral health among 3 <sup>rd</sup> grade students receiving free and reduced lunches	9
Prenatal Health	
Unintended pregnancy	
Alcohol use during pregnancy	
Smoking during pregnancy	
Low Birth Weight	11
Teen fertility	12
Substance Abuse	13
Adult smokers	13
Adult binge drinking	
Substance abuse among high school students	14
Drinking and driving among high school students	14
Unintentional Injuries 2005-2009	15
Routt County: Unintentional transportation injuries, 2005-2009 age adjusted rates	15
Routt County: Unintentional injuries due to falls, 2005-2009 age adjusted rates	16
Moffat County: Unintentional transportation injuries, 2005-2009 age adjusted rates	16
Moffat County: Unintentional natural environment injuries, 2005-2009age adjusted rates	17
Age groups with higher rates of injury compared to Colorado, 2005-2009	17
Overweight and Obesity	18
Diabetes	18
Environmental Health: Indoor Air Quality - Radon	19
Asthma	20
Cancer (morbidity)	20
Leading Causes of Death 2005-2009	21

Suicide	21
Ten leading causes of death, age-adjusted death rates per 100,000	21
Overall age-adjusted death rate, 2005-2009 all causes	22
System Capacity and Performance The System	
Funding	23
Workforce	23
Public Health Activities	23
Other Public Health Programs	24
Healthier Living	24
Cardiovascular and Diabetes Program	24
Aging Well Services	24
Environmental Health	24
Community Health Assessment and Planning	24
The Colorado Health Assessment and Planning System The Timeline and Stakeholder Participation	
CHAPS Stakeholders	25
Type of community health data collected and reviewed	26
Stakeholder meetings	26
Prioritization of Health Issues	27
First phase of the prioritization process	27
Second phase of the prioritization process	28
Third phase of the prioritization process	29
Goals and Strategies for Public Health Improvement Unintended Pregnancy Prevention	
Unintentional Injury Prevention	
Mental Health	
Environmental Health	34
System-wide Coordination to Accomplish Colorado's Public Health Improvement Plan Financial Plan to meet Public Health needs, Core Services Provision	

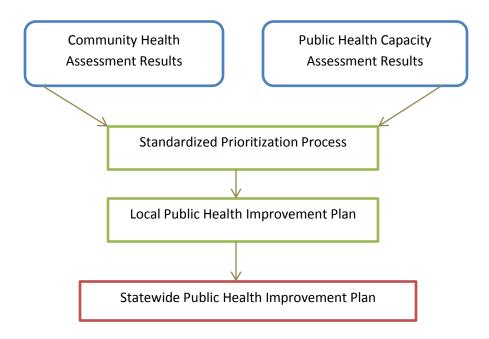
# Introduction

The 2012-2016 Community Health Improvement Plan for Routt and Moffat Counties is a roadmap for improving public health in several key priority areas across the two counties. The plan provides the background and process for the Colorado Health Assessment and Planning System (CHAPS), highlights findings from the community health assessment, outlines the process by which the public health priorities were chosen, and describes the goals, objectives, and action plans for each health priority area.

### **Background, Process, and Purpose**

In 2008, Senate Bill 08-194, the Public Health Act, was signed into law. One component of Colorado's Public Health Act requires the state health department to create a statewide public health improvement plan. In 2009 *Colorado's Public Health Improvement Plan – from Act to Action* was published. It outlines a plan to create a cohesive public health system across Colorado, whereby every person in the state is assured access to core public health services.

The Colorado Public Health Act also mandates that each local health agency develop its own local public health improvement plan based on a community health assessment and a capacity assessment. The Public Health Act requires that local plans be developed and implemented by community stakeholders. After community health status and public health capacity are thoroughly reviewed, stakeholders then participate in a standardized prioritization process that yields goals and strategies for improving local public health in a few key areas.

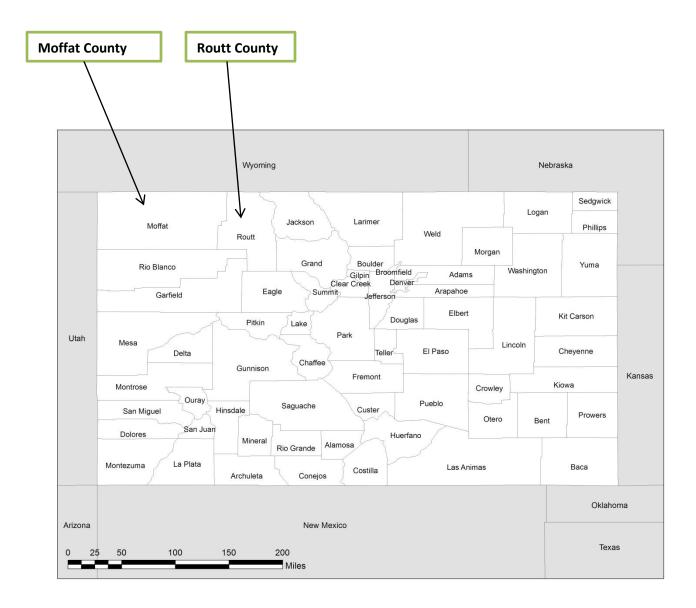


In alignment with state-wide public health improvement goals, assessments of community health, local public health resources, and ability to deliver services were conducted.

### **Community Profile**

Moffat and Routt Counties are located in northwest Colorado. Routt County is contiguous to six Colorado counties and borders Wyoming to the north. Moffat County is contiguous to two Colorado counties, Wyoming to the north, and Utah to the west. Routt is a rural county with 2,362 square miles and 10 persons per square mile. Moffat is a frontier county with 4,743 square miles and 2.9 persons per square mile.

Source: U.S. Census Bureau State and County Quickfacts, last revised August 16, 2012



#### Population, age, and percent growth

According to the 2010 US Census data, Routt County has 23,509 residents and Moffat County has a population of 13,795. From 2000 to 2010 Routt saw a 19.4% increase in population, while Moffat County grew 4.6%.

	Routt	Moffat	Colorado	US
2000	19,690	13,184	4,301,261	281.4 million
2010	23,509	13,795	5,029,196	308.7 million
Percent Change	+ 19.4%	+ 4.6%	+16.9%	+9.7

Population 2000, 2010, and Percent Change

The following tables show the current age distribution and the percent change in population by age from 2000 to 2010 in Routt and Moffat Counties and Colorado. From 2000 to 2010, both counties and the state experienced a decrease in persons ages 20 to 44 years and a decrease in persons ages 5 to 19 years. Routt County had the highest percent growth in the 65 and older population. Interestingly, Moffat County residents younger than five years increased by almost 15% whereas the state saw a slight decrease and Routt County had no change in that age group from 2000 to 2010.

2010	< 5 years	5–19 years	20-44 years	45-64 years	65+ years
Routt	6%	18%	36%	33%	8%
Moffat	8%	22%	32%	28%	11%
Colorado	7%	20%	35%	27%	11%

#### Percent change by age group from 2000 to 2010

	Younger than 5	5 - 19	20-44	45-64	65 or older
Routt	0%	-10.7%	-17.7%	+26.0%	+62%
Moffat	+14.7%	-11.1%	-12.0%	+19.4%	+12.8%
со	-1.5%	-5.6%	-11.1%	+20.3%	+13.4%

Source: Colorado State Demography Office 2010 Census Data

#### Race, ethnicity, and language

Most residents of Routt and Moffat Counties are White. Slightly more than 20% of Colorado residents identify as being of Hispanic origin, whereas 14.4% are of Hispanic origin in Moffat and 6.1% in Routt.

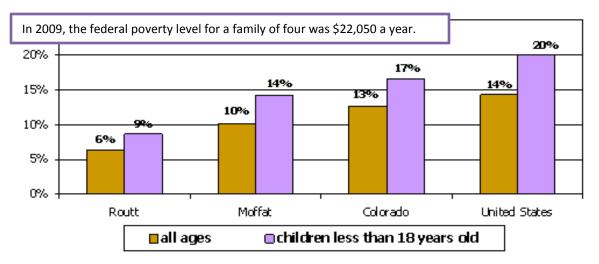
	Routt	Moffat	со
White	90.7%	82.7%	70%
Black / African American	0.4%	0.2%	3.8%
American Indian / Alaskan Native	0.3%	0.7%	0.6%
Asian / Pacific Islander	0.7%	0.6%	2.8%
Some Other Race Alone	0%	0%	0.2%
Two or More Races Total	1.1%	1.3%	2%
Hispanic origin (of any race)	6.8%	14.4%	20.6%
*Language spoken at home other than English	6.1%	10.7%	16.6%

\*"Language spoken at home other than English" Source: US Census Bureau, 2005-2009 American Community Survey

Source for data on race: Colorado State Demography Office 2010 Census Data

#### **Poverty**

According to data from US Census Bureau, Small Area Income and Poverty Estimates, in 2009 Routt County had 6% of the population living at or below poverty; 10% of Moffat residents were living at or below poverty level. Colorado and U.S. poverty rates were higher at 13% and 14%, respectively.



### **Highlights from the 2011 Community Health Assessment**

The purpose of the community health assessment is to compile health indicators from several domains including population characteristics, environment, health behaviors, mental health, access to care, and population health outcomes. This section and the previous section contain some of the data from the community health assessment. Routt and Moffat County stakeholders reviewed and interpreted data relevant to the community's health. The data sources are noted under each section.

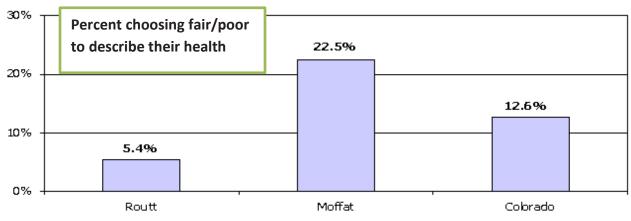
### **Self-Perceptions of Individual Health**

This section includes three questions asked as part of the Behavioral Risk Factor Surveillance System (BRFSS). The Colorado BRFSS is a system of telephone surveys sponsored by the Centers for Disease Control to monitor lifestyles and behaviors related to the leading causes of mortality and morbidity. The Survey Research Unit of the Health Statistics Section of the Colorado Department of Public Health and Environment began collecting data on a monthly basis in January 1990. The Survey Research Unit now completes more than 1,000 BRFSS surveys a month with adult residents of Colorado.

#### Source: CDPHE website retrieved from http://www.chd.dphe.state.co.us/topics.aspx?q=Adult\_Health\_Data

#### Fair to poor health

When asked to choose between excellent-good or fair-poor to describe their health, more than one-fifth (22.5%) of Moffat residents chose fair-poor. Fewer Routt residents chose fair-poor to describe their health (5.4%).



Source: Behavioral Risk Factor Surveillance System 2007-2008

#### Number of poor physical and mental health days in past month

The following tables show the average number of days residents had poor physical and mental health in the past month (self-report). Percentages in each of the categories (columns) tended to be almost the same for physical health and mental health. For example, 71% of Routt residents reported no poor physical health days and 70% reported no poor mental health days. Likewise, 67% of Colorado residents reported no poor physical health days and 66% reported no poor mental health days. Moffat County had the most residents reporting eight or more poor physical health days (17%) and eight or more poor mental health days (20%).

	No poor physical health days	1-7 poor physical health days	8 or more poor physical health days
Routt	71%	22%	8%
Moffat	62%	20%	17%
Colorado	67%	22%	11%

	No poor mental health days	1-7 poor mental health days	8 or more poor mental health days
Routt	70%	21%	9%
Moffat	60%	20%	20%
Colorado	66%	22%	12%

Source: Behavioral Risk Factor Surveillance System 2007-2008

### **Oral Health**

#### Oral health among 3rd grade students receiving free and reduced lunches

Both Routt and Moffat Counties have fewer children with a history of dental caries and untreated tooth decay compared to Colorado. Caries experience, represented by a missing tooth or presence of a cavity or filling, indicates that opportunities for primary prevention have been missed. Routt and Moffat both meet the healthy people 2020 goal with regard to children with dental sealants.

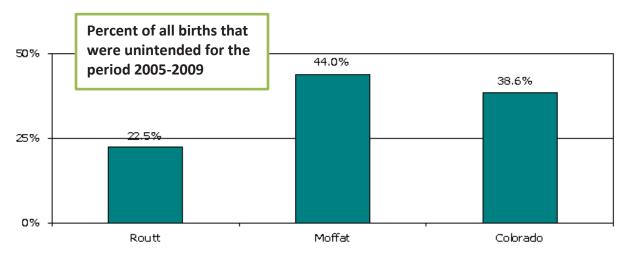
	History of dental caries	Untreated tooth decay	Dental sealants (higher % is better)
Routt	48%	18%	43%
Moffat	51%	21%	30%
Colorado	57%	25%	35%
Healthy People 2020	49%	26%	28%

*Source: Colorado oral Health Survey 2006-2007 retrieved from CDPHE 2011 Maternal Child Health data sets* 

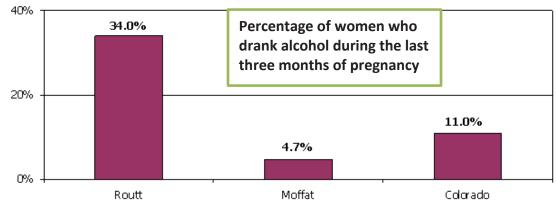
### **Prenatal Health**

The following three graphs display data on unintended births, and alcohol use, and cigarette use during pregnancy. Moffat County has a higher percentage of unintended births (44%) compared to Routt County (22.5%) and Colorado (38.6%). Routt County has an alarming percentage of women reporting alcohol use during pregnancy (34%). Moffat County has high rates of cigarette use before getting pregnant (51%) and the last trimester of pregnancy (38%).

#### **Unintended pregnancy**

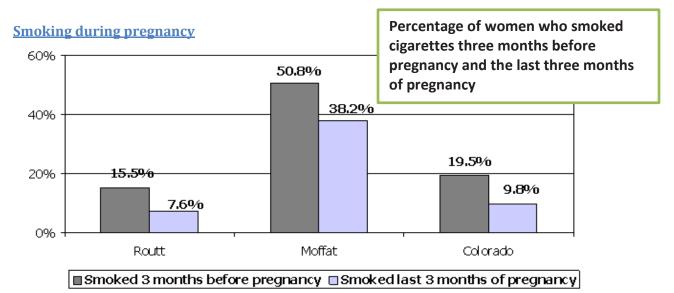


Source: Pregnancy Risk Assessment Monitoring System 2005-2009 (retrieved from MCH 2011 Data Set)



#### Alcohol use during pregnancy

Source: Pregnancy Risk Assessment Monitoring System 2005-2009 (retrieved from MCH 2011 Data Set)



Source: Pregnancy Risk Assessment Monitoring System 2005-2009 (retrieved from MCH 2011 Data Set)

### Low Birth Weight

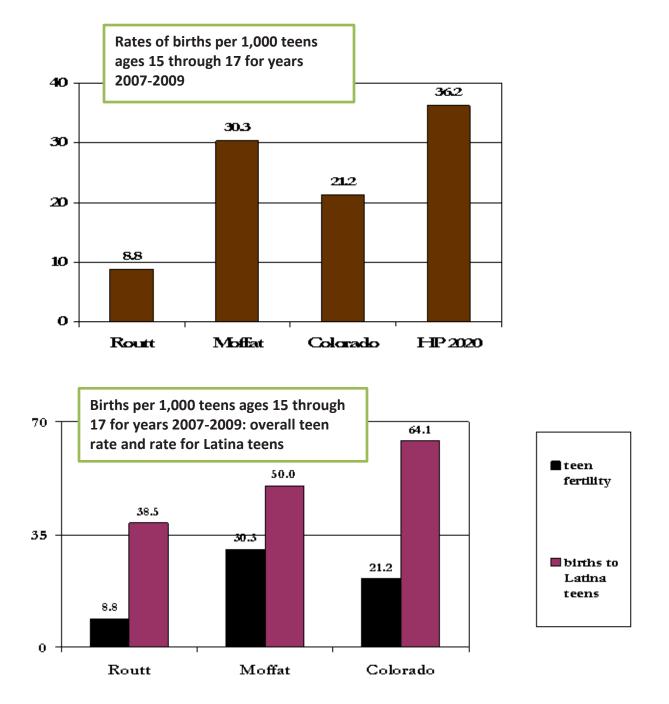
Routt and Moffat Counties, as well as Colorado, have higher rates of babies born with low birth weight compared to the Healthy People 2020 goal (although Moffat is close to goal). A baby is considered to have low birth weight if they are born 5 lbs. 8 oz. or less. The rate equals the sum of all low weight or very low weight births divided by all live births and the result is multiplied by 100.

Low Birth Weight	Rate
Healthy people 2020	7.8
Colorado	8.9
Moffat	8.1
Routt	8.9

Source: 2007-2009 data retrieved from CDPHE 2011 Maternal Child Health data sets

### **Teen fertility**

The first graph below shows that teen fertility rates for Colorado, Routt County, and Moffat County are all lower than the Healthy People 2020 goal rate; however Moffat County has a much higher teen fertility rate compared to Colorado overall. The second teen fertility graph shows a much higher rate of births to Latina teens compared to the overall teen fertility rates of Routt and Moffat Counties and Colorado.

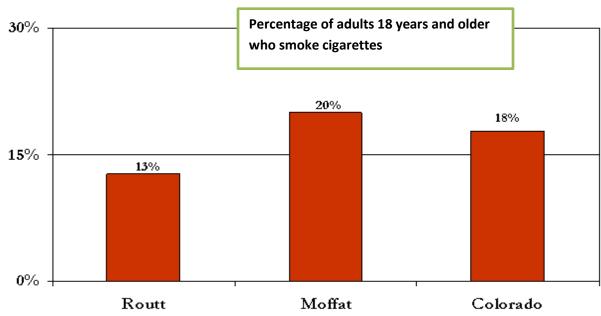


Source: 2007-2009 data retrieved from CDPHE 2011 Maternal Child Health data sets

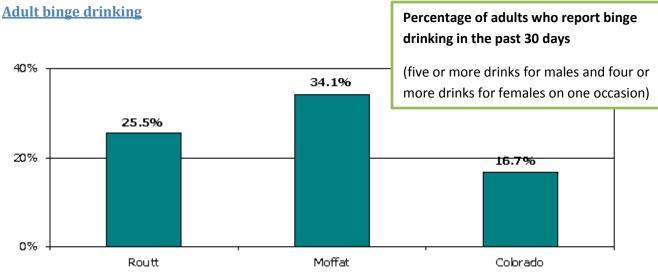
### **Substance Abuse**

**Adult smokers** 

Data from the BRFSS 2007-2008 reveals higher levels of tobacco use among adults in Moffat County compared to Routt County; tobacco use is also slightly higher in Moffat County compared to Colorado. The data also shows a high prevalence of binge drinking among adults in Routt and Moffat Counties.



Source: Behavioral Risk Factor Surveillance System 2007-2008



Source: Behavioral Risk Factor Surveillance System 2007-2008

#### Substance abuse among high school students

In the 2009-2010 Healthy Kids Colorado Survey, high school students in Routt and Moffat Counties reported their substance use in the past 30 days. Compared to the state overall, Routt and Moffat Counties had higher rates of alcohol use (at least one drink) and binge drinking (having at least 4-5 drinks at one time). Compared to Moffat County and the state, high school students in Routt County reported more marijuana use. Compared to Routt County and the state, Moffat County high school students reported higher rates of tobacco use (cigarettes and chewing tobacco, snuff, or dip). Roughly one-quarter or more of the students in Routt and Moffat report using prescription drugs that have not been prescribed to them.

піві	i school students, s	- 12 grades combi	neu
	Routt	Moffat	Colorado
Alcohol	47%	43%	41%
Binge drinking	34%	31%	25%
Marijuana	30%	22%	25%
Cigarettes	17%	24%	18%
Chewing tobacco, snuff or dip	18%	25%	11%
Prescription drugs, no prescription	24%	29%	Data unavailable

### Prevalence of Substance use in Past 30 Days among High School Students. 9<sup>th</sup> – 12<sup>th</sup> grades combined

#### Drinking and driving among high school students

In the same 2009-2010 Healthy Kids Colorado Survey, a higher percentage of Routt and Moffat high school students reported that they drove after drinking. Almost one-quarter of Routt students and more than one-quarter of Moffat students rode with someone who had been drinking.

### Drinking and driving in the past 30 Days among high school students, $9^{th} - 12^{th}$ grades combined

	Routt	Moffat	Colorado	
Drove after drinking during the past 30 days	13%	14%	7%	
Rode with someone who had been drinking in the past 30 days	23%	27%	25%	

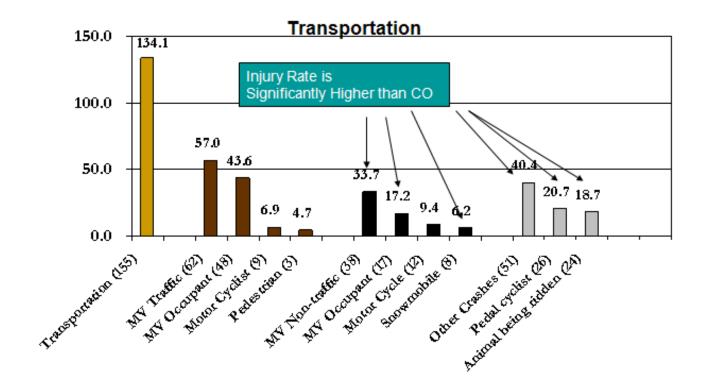
Source: 2009-2010 Healthy Kids Colorado Survey

### **Unintentional Injuries 2005-2009**

All data in this section come from Colorado Injury Hospitalization Statistics; the statistics were retrieved from the Colorado Health Information Dataset (CoHID). The Colorado Health and Hospital Association (CHHA) gathers hospital discharge data from all acute care and many specialty hospitals in the state. Injury hospitalizations are identified using specific codes from the International Classification of Diseases, Version 9, Clinical Modification (ICD-9-CM). Mechanism of injury (i.e., the activities or circumstances that led to the hospitalization) is determined by external cause of injury codes (E-codes). The E-codes are a subset of the International Classification of Diseases, Ninth Revision, used to classify the environmental events, circumstances, and conditions that are the cause of injury, poisoning, or other adverse effects. The mechanisms of injury include broad categories like transportation, falls, and natural environment. These broad categories are comprised of smaller subsets of categories.

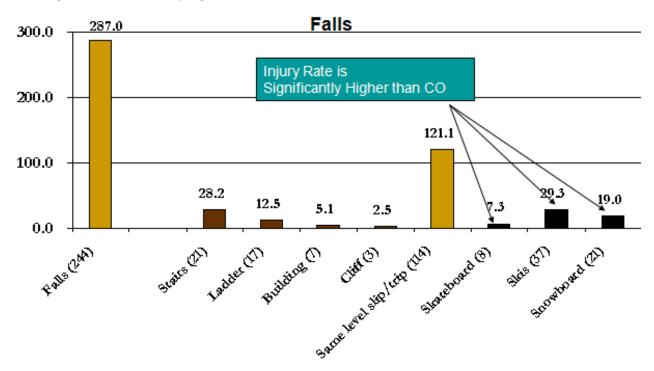
#### Routt County: Unintentional transportation injuries, 2005-2009 age adjusted rates

Routt County has a high rate of transportation injuries compared to Colorado. However, the overall rate of transportation injuries is high because of higher rates in specific subcategories including motor vehicle non-traffic, motor vehicle occupant, snowmobile, pedal cyclist, animal being ridden, and "other crashes."



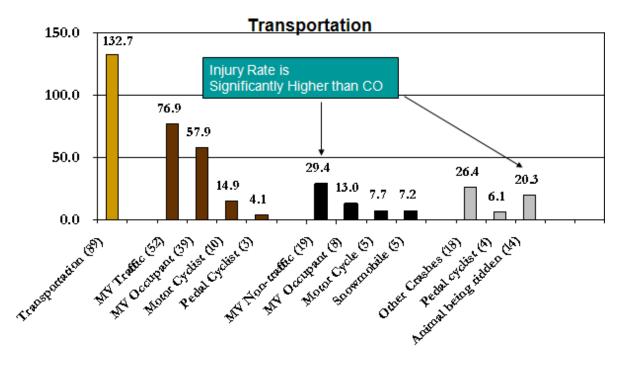
#### Routt County: Unintentional injuries due to falls, 2005-2009 age adjusted rates

Routt County has a high rate of injuries due to falls compared to Colorado. However, only three subcategories are statistically higher than the state overall - skateboard, skis, and snowboard.

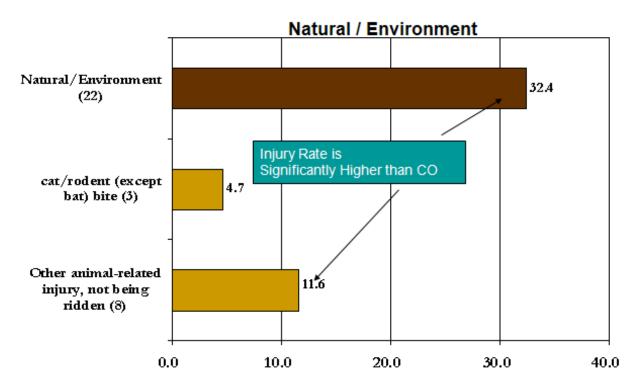


Moffat County: Unintentional transportation injuries, 2005-2009 age adjusted rates

Moffat County has a high rate of transportation injuries due to statistically higher rates in motor vehicle non-traffic and animal being ridden categories.



Moffat County: Unintentional natural environment injuries, 2005-2009age adjusted rates Compared to the state overall, Moffat County has a statistically higher rate of natural environment injury hospitalizations. Additionally, the subcategory called "other animal related injury, not being ridden" was statistically higher than the state



Age groups with higher rates of injury compared to Colorado, 2005-2009

Age	Routt	Moffat
10 – 14	×	Other transportation
15 - 19	x	x
20 -24	<ul> <li>Total unintentional</li> <li>Falls</li> </ul>	x
25-44	<ul> <li>Other transportation</li> </ul>	<ul> <li>Total unintentional</li> <li>Transportation</li> <li>Other Transportation</li> </ul>
45 - 64	<ul> <li>Other transportation</li> <li>Other unintentional</li> </ul>	x
75 - 84	x	Total unintentional

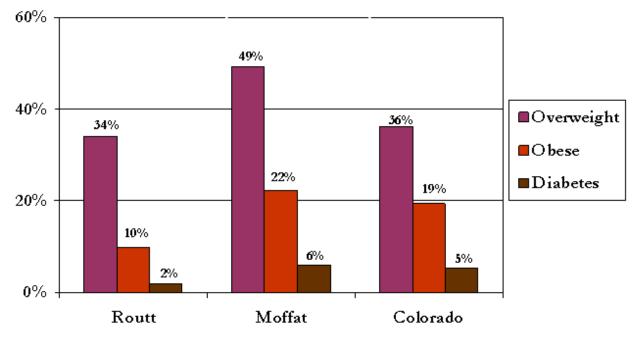
"other transportation" is all transportation that is not motor vehicle traffic.

### **Overweight and Obesity**

The 2007-2008 BRFSS included two questions about body weight. Based on height and weight, body mass index (BMI) questions asked whether individuals were overweight (BMI is 25 to 29.9) or obese (BMI is 30 or higher). Results indicate Moffat county has a higher percentage of overweight residents (49%) compared to Routt County (34%) and Colorado (36%). Moffat County was closer to Colorado overall with regard to obesity; Moffat County has 22% reporting obesity and Colorado 19%. Routt was lower with 10% reporting obesity.

### **Diabetes**

The 2007-2008 BRFSS included a question about whether individuals have ever been diagnosed with diabetes. Moffat County was close to Colorado with 6% of Moffat residents and 5% of the state residents reporting a history of diabetes. Routt County was lower with 2%.



Source: Behavioral Risk Factor Surveillance System 2007-2008

### **Environmental Health: Indoor Air Quality - Radon**

Radon is a colorless, odorless, radioactive gas that forms naturally in soil. It is produced when uranium in the soil breaks down. Radon is known to cause lung cancer and it can seep into homes and workplaces through cracks and openings in floors and crawlspaces. Inexpensive radon kits can be purchased to test radon levels. Colorado Department of health and Environment recommends mitigation when levels are greater than 4pCi/L.

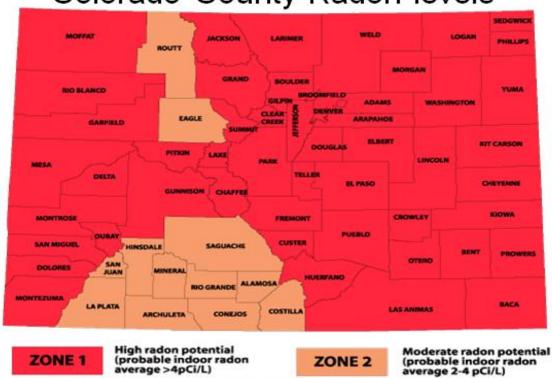
Source: CDPHE Radon Program retrieved from

http://www.coepht.dphe.state.co.us/Environment/radon.aspx

The 2007-2008 BRFSS included two questions about radon testing in homes. Regional level data is available for Health Statistics Region 11 (HSR 11) which includes Jackson, Routt, Moffat and Rio Blanco Counties.

	HSR 11		HSR 11 Colorado			do	
	Yes	No	Unsure		Yes	No	Unsure
Has your house ever been tested for radon?	25%	63%	12%		35%	52%	13%
Were the radon levels above 4Pci/L?	11%	43%	46%		12%	52%	36%

Source: Behavioral Risk Factor Surveillance System 2007-2008

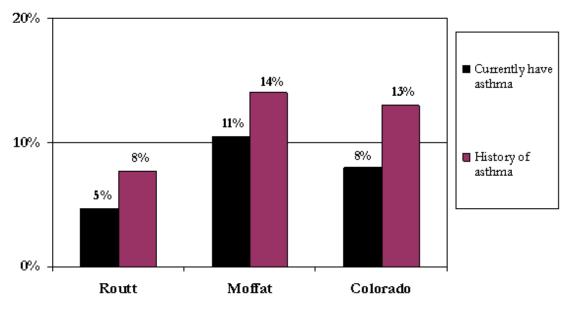


# Colorado County Radon levels

Source: Map developed by U.S. EPA and U.S. Geological Survey; retrieved from http://co-radon.info/CO\_radon\_map.html

### Asthma

When asked about currently having asthma or ever having asthma in the past, more Moffat County residents reported currently having an asthma condition as well as having a history of the condition, followed by the state overall.



• Source: Behavioral Risk Factor Surveillance System 2007-2008

### **Cancer (morbidity)**

The table below shows the 2005-2007 age-adjusted caner rates per 100,000. These are rates of morbidity, those living with cancer. Moffat County has higher overall cancer rates, lung and bronchus cancer rates, and female breast cancer rates compared to Colorado and Routt County. Routt County has a higher prostate cancer rate compared to the state and Moffat County. The region (HSR11) has a higher rate of skin cancer compared to the state overall.

	All cancers combined	Lung and Bronchus	Female Breast	Prostate	Skin
Colorado	437.9	50.1	122.0	162.2	21.9
Moffat	<mark>479.9</mark>	<mark>76.4</mark>	<mark>141.5</mark>	154.4	
Routt	378.3	43.2	121.9	<mark>173.1</mark>	
HSR 11					<mark>24.9</mark>

Source: Colorado Central Cancer Registry 2005-2007 retrieved from CDPHE Regional Health Profiles

### Leading Causes of Death 2005-2009

#### Suicide

Routt and Moffat Counties both have death rates from suicide that are higher than the state. Furthermore, suicide is among the 10 leading causes of death for both counties. Moffat County also has a teen suicide rate much higher than the state for this 5-year period.

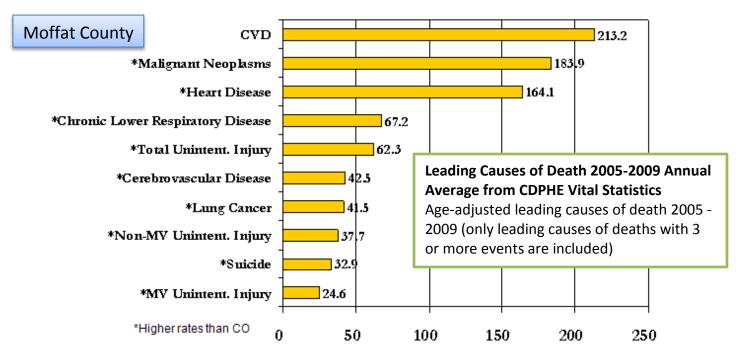
Vital Statistics, CDPHE	Routt	Moffat	Colorado
Teen Suicide ages 15-19 *Rate of suicide deaths per 100,000 teens ages 15 through 19 for 2005-2009.	DS	52.6	12.2
Suicide Rate, all ages *Age-adjusted suicide death rate per 100,000 for 2005-2009	19.1	32.9	16.5

DS indicates data are suppressed for confidentiality when the value is one or two individuals or events.

#### Ten leading causes of death, age-adjusted death rates per 100,000

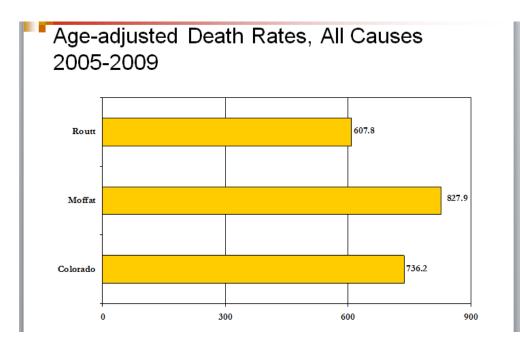
In addition to suicide rates, Moffat and Routt Counties also have higher death rates due to unintentional injuries compared to the state. Both motor vehicle and non-motor vehicle injury death rates are higher than Colorado. Additionally, Moffat County has higher death rates compared to Colorado in the following categories: malignant neoplasms, heart disease, chronic lower respiratory disease, cerebrovascular disease, and lung cancer.

	CVD				166.0		
Routt County	Heart Disease			131.	1		
,	Malignant Neoplasms			113.7			
	*Total Unintent. Injury		66.6				
*Non-MV Unintent. Injury			47.7				
- Chronic Lower Respiratory Disease		31.9		Leading Causes of Death 2005-2009 Annual Average from CDPHE Vital Statistics Age-adjusted leading causes of death 2005 - 2009 (only leading causes of deaths with 3 or more events are included)			
		29.8					
Lung Cancer		29.1					with 3
	*Suicide	19.1	L	or more eve	ints are inclu	10e0)	
*MV Unintent. Injury		18.9					
	*Higher rates than CO	) 50	0 1	100 15	50 20	00 25	0



#### Overall age-adjusted death rate, 2005-2009 all causes

The overall death rate, age-adjusted for all causes, is higher in Moffat (827.9) than in Colorado (736.2) and Routt County (607.8).



Source: CDPHE Vital Statistics

## **System Capacity and Performance**

### **The System**

The Local Boards of Health in Routt and Moffat Counties have the authority to adopt public health regulations and advise local health departments or elected officials on policies, programs, and budgets. In Routt County the LPHA Director is Mike Zopf, Director of Environmental Health. Moffat County has not named a PH Director but the County Commissioners oversee all public health activities. The Local Boards of Health in Routt and Moffat Counties contract out local health department activities to Northwest Colorado Visiting Nurse Association (NWCOVNA).

### Funding

Most of the revenue to fund public health needs, including core services provisions, come from state sources, private foundations, and city and county governments. NWCOVNA is successful at billing private health insurance, Medicaid and CHP+ and this represents a growing revenue source, especially in light of insurance reform changes brought about by the Affordable Care Act. Nevertheless, certain projects are perennially underfunded and in general, funding for operations and overhead expenses is difficult to sustain in a rural LPHA. Additionally, many programs have gone through a series of funding cuts and/or are have unreliable funding due to the fiscal crisis the state is facing as a result of the economic downturn. Unpredictable funding in turn presents a significant barrier to program planning and capacity.

### Workforce

Seventy-three full and part-time employees, the equivalent of 47.45 FTEs, make up the public health workforce in both counties. The workforce includes one part-time public health manager, five public health nurses, one part-time nutritionist, one public information specialist, one emergency preparedness coordinator, and four administrative personnel.

### **Public Health Activities**

NWCOVNA directly provides immunizations and screenings in Routt and Moffat Counties. Adult and child Immunizations are provided as well as screenings for HIV/AIDS, other STDs, Tuberculosis, cardiovascular disease and diabetes. Some treatment options are available for STDs through NWCOVNA's Title X program and through its Federally Qualified Health Center.

In Routt and Moffat Counties, services for women and families provided by NWCOVNA include family planning, prenatal care, WIC, New Arrivals home visits, Nurse Family Partnership, and EPSDT (now called Healthy Communities). NWCOVNA provides case management, behavioral health and nutrition counseling to uninsured pregnant women and also contracts with local OB-GYN providers who provide prenatal and labor and delivery care.

Public health programs in both counties are aimed at population-based prevention; the programs target unintended pregnancy, chronic disease, nutrition, physical activity, tobacco, substance abuse and depression. Public health surveillance is also performed for communicable/infectious disease, chronic disease, behavioral risk factors, maternal child health, and syndromic surveillance.

Laboratory services, outreach and enrollment for medical insurance, school health and vital records are other activities linked to public health and provided by NWCOVNA.

### **Other Public Health Programs**

#### **Healthier Living**

Healthier Living is a 6-week self-management program designed to help adults live healthier and more active lives. Participants learn strategies for managing health challenges and successful goal setting. Healthier Living classes are held in Routt and Moffat Counties throughout the year.

#### **Cardiovascular and Diabetes Program**

The Cardiovascular and Diabetes Program includes screenings, education, resources, and referrals. Cardiovascular and Diabetes screenings include BMI, blood pressure, cholesterol panel, and glucose screenings. Case managers promote chronic disease self-management through goal setting, education, and motivational interviewing.

#### **Aging Well Services**

The Aging Well program offers a variety of fitness classes for older adults in Routt and Moffat Counties. Classes are geared toward different fitness levels and promote proper body mechanics, strength, flexibility, balance, and relaxation. Specific classes offered are Movement and Exercise, N'Balance, Tai Chi levels I and II, and Arthritis Foundation Aquatics. Aging Well also offers foot care clinics and senior wellness clinics. The foot care clinics include consultation, foot inspection, toe nail trim, and foot massage. The wellness clinics include blood pressure check, blood glucose reading, flu and pneumonia shots, medication review, and nutrition and weight assessment.

#### **Environmental Health**

In Routt County, the Environmental Health Department conducts a variety of environmental and public health programs. The department provides a consumer protection program under contract from the Colorado Department of Public Health and Environment. This includes the inspection, regulation, and licensing of all retail food establishments and retail markets in Routt County. The department also inspects all schools, child care centers, and children's camps to determine compliance with state health codes. Routt County's environmental health activities also include the regulation of new public spas, hot tubs and swimming pools. The department provides for the regulation of the installation and use of Onsite Wastewater Treatment Systems that serve dwellings and other buildings not connected to municipal or community wastewater systems. Other activities provided through the Environmental Health Department include food safety education, pollution prevention, air pollution monitoring, noise pollution, roadside cleanup events. Routt County Environmental Health coordinates the Upper Yampa River Basin Water Quality Data Collection Program and collaborates with local non-profit organizations such as Yampa Valley Recycles and the Yampa Valley Sustainability Council that promotes area recycling and sustainability programs. Routt County also maintains a certified lab that provides for the bacteriological testing of public and private water supplies.

### **Community Health Assessment and Planning**

A Community Health Assessment was conducted in 2011 for Routt and Moffat Counties. Results of the health assessment informed the current health improvement plan. The local plan was developed in accordance with the Colorado Health Assessment and Planning System (CHAPS) guidelines and aligns with the state health improvement plan.

# The Colorado Health Assessment and Planning System (CHAPS)

### The Timeline and Stakeholder Participation

Health data was collected for the community health assessment in the latter part of 2010. The community health assessment data, both quantitative and qualitative, was compiled into several versions of PowerPoint presentations. Stakeholders reviewed and discussed the community health assessment during several meetings in 2011. The prioritization of public health issues occurred in December 2011. Strategies and action plans to address the public health priority areas were chosen and recorded in the early part of 2012. The final version of the *Community Health Improvement Plan for Routt and Moffat Counties 2012-2016* was submitted to the Office of Planning and Partnerships at CDPHE in October 2012.

Agency
Northwest CO Visiting Nurse Association (NWCOVNA)
NWCOVNA
CO West Regional Mental Health (CWRMH)
Routt County Environmental Health Department
Yampa Valley Medical Center (YVMC)
Moffat County Commission
Routt County Department of Human Services
Northwest CO Dental Coalition
Board of Directors NWCOVNA
Board of Directors NWCOVNA
Moffat County Department of Social Services
The Memorial Hospital

### **CHAPS Stakeholders**

Type of Data	Statistical data — already published	Qualitative data - interviews to gather perceptions and prioritize health issues
<ul> <li><u>Statistics</u></li> <li>Incidence</li> <li>Prevalence</li> <li>Rates</li> <li>Age-adjusted rates</li> <li>Percent and percent changes</li> <li><u>Qualitative</u></li> <li>Individual interviews</li> </ul>	<ul> <li>population characteristics</li> <li>economic characteristics</li> <li>physical environment</li> <li>injuries</li> <li>substance use</li> <li>fertility / prenatal health</li> <li>child health</li> <li>access to care</li> <li>adult health behaviors and conditions</li> <li>quality of life</li> <li>population health outcomes</li> </ul>	<ul> <li>Mike Zopf – Environmental Health</li> <li>Bill Leonard – Craig Police Department</li> <li>Tom Gangel – CWRMH</li> <li>Diane Miller - NWCOVNA</li> <li>Frank May – YVMC</li> <li>Lisa Brown – NWCOVNA</li> <li>Vickie Clark – Routt DHS</li> <li>Janet Pearcey – Dental Coalition</li> <li>Audrey Danner – Moffat County Commission</li> </ul>

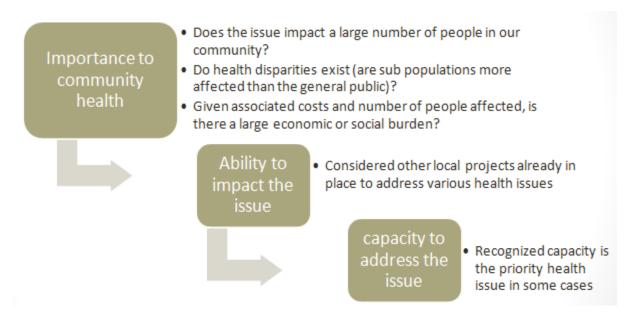
### Type of community health data collected and reviewed

### **Stakeholder meetings**

Type of Meeting	Participants	Date
Data review – all data	Public Health Nurses	May 3, 2011
Data reviewall data	Community stakeholders	May 25, 2011
Prioritization meeting – 12 broad areas	Community Stakeholders	September 6, 2011
Individual interviews to further prioritize data	Community stakeholders	October – November 2011
Prioritization meeting – choose priorities from the top five health areas	Community Stakeholders	December 19, 2011
NWCOVNA BOD and public input meeting	NWCOVNA BOD, community stakeholders and public	June 27, 2012
On agenda at Routt County Commissioners Meeting	Routt County Commissioners	July 17, 2012
On agenda at Moffat County Commissioners Meeting	Moffat County Commissioners	July 24, 2012

### **Prioritization of Health Issues**

The following diagram represents the three main focus areas upon which the prioritization process was based: importance to community health, ability to impact the issue, and capacity to address the issue. Each of these main areas contains a subset of questions or observations used to facilitate the prioritization process.



#### First phase of the prioritization process

To begin the prioritization process, a presentation was given that highlighted data from the community health assessment; those highlights were from 12 broad health areas that showed sub-optimal statistics for Routt or Moffat Counties. The following health areas were rated on importance using a prioritization tool created by the Office of Planning and Partnerships at CDPHE.

Oral health	Access to care	Adult Asthma	Unintentional injuries
Fertility & prenatal health	Adult diabetes	Environmental health	Mental health among high school students
Substance abuse	Body weight	Cancer rates	Mortality

Rating the "Importance to Community Health" involved gathering ratings on a subset of questions: Does the issue impact a large number of people in our community? Do health disparities exist (are sub populations more affected than the general public)? Given associated costs and number of people affected, is there a large economic or social burden?

#### Second phase of the prioritization process

Unlike the quantitative approach in the first phase, the second phase of the prioritization process involved a qualitative approach. Individual interviews were conducted with stakeholders. Information, perceptions, and opinions were gathered regarding which health issues should be included in the 5-year improvement plan.

The interviews were mainly open ended but the following discussion points were used as a guide to gather qualitative data:

- Reviewed the ranking of the twelve broad health areas from the first phase
  - o Asked whether the stakeholder was in agreement with the rankings; why or why not
- Asked whether the issue is already being addressed in the community?
  - Is the health issue being addressed adequately?
  - Should more resources be put toward the issue?
- Do we have the ability to address the issue?
  - Do effective strategies exist?
- Do we have the capacity to address the issue?
  - Is capacity an important priority for the 5-year improvement plan?

By the end of the second phase, five health areas rose to the top as priorities.

Unintended pregnancy
Obesity
Unintentional Injuries
Mental health
Environmental health

#### Third phase of the prioritization process

The third phase involved a meeting to decide on the final priorities. Local health issues were discussed and preliminary commitments were made to implement strategies for improvement. During this time obesity was taken off the list as it was decided that this issue is already being addressed through several other organizations.

Public health priorities for the *Community Health Improvement Plan for Routt and Moffat Counties* 2012-2016 include:

### Routt County Priority Issues to be included in 5-year improvement plan

- Unintended pregnancy prevention
- Injury prevention
- Mental health
- Environmental health

### Moffat County Priority Issues to be included in 5-year improvement plan

- Unintended pregnancy prevention
- Injury prevention
- Mental health

# **Goals and Strategies for Public Health Improvement**

### **Unintended Pregnancy Prevention**

A pregnancy is considered unintended if, at the time of conception, the pregnancy is unwanted, unplanned or mistimed. Unintended pregnancies are associated with significant costs to the health care system as well as negative health consequences for women and their children.<sup>1</sup>

Unintended pregnancies are extremely common; nearly half of all pregnancies in the United States are unplanned.<sup>2</sup> Higher rates of unintended pregnancy are found among African American, Hispanic, and low income women.<sup>1,2</sup> Although women of all ages have unintended pregnancies, teens are at higher risk. Effective family planning efforts include increasing access to contraception, particularly the long acting reversible methods.<sup>1</sup> The most effective approach for reducing unintended pregnancies in teens includes a combination of educational and contraceptive interventions.<sup>3</sup>

The strategies that will be employed to reduce unintended pregnancy locally include (1) seek funding to increase long-acting contraceptives through Family Planning programs in Routt and Moffat Counties and (2) seek funding for a social marketing campaign in Routt and Moffat Counties.

Sources:

- 1. Reframing unintended pregnancy: A public health model. (2010). *Contraception, 81,* pp. 363-366.
- 2. CDC. Unintended pregnancy prevention. Retrieved May 2012 from http://www.cdc.gov/reproductivehealth/unintendedpregnancy
- 3. Oringanje, C., Meremikwu, M. M., Eko, H., Esu, E., Meremikwu, A., & Ehiri, J. E. (2009). Interventions for preventing unintended pregnancies among adolescents. *Cochrane Database of Systematic Reviews*, Issue 4. Art. No.: CD005215. DOI:10.1002/14651858.CD005215.pub2.

Strategy	Seek funding for long-acting contraceptives and social marketing in Routt and Moffat Counties
Five year goal	<ul> <li>Reduce the rate of unintended pregnancy in Northwest Colorado, specifically in Routt and Moffat Counties</li> </ul>
Objectives	<ul> <li>Decrease the unintended pregnancy rate in Moffat County by 10%, from 43.4% (2006-2010) to 39% (2011-2015)</li> <li>Decrease the unintended pregnancy rate in Routt County by 10%, from 27.3% (2006-2010) to 24.6% (2011-2015). [PRAMS Data]</li> </ul>
Action steps	<ul> <li>Seek funding to increase access to long-acting contraceptives through the Family Planning programs in Routt and Moffat Counties</li> <li>Seek funding for social marketing campaign in 2012; start campaign by January 2013</li> </ul>
Organization(s) responsible	NWCOVNA

### **Unintentional Injury Prevention**

Injury prevention is an important public health issue. According to the Center for Disease Control (CDC) a person dies from an injury every three minutes in the United States and unintentional juries are the leading cause of death for people ages 1 to 44 years. With non-fatal injuries, loved ones are often called upon to take on the caregiver role, resulting in stress and loss of work time and income for the caregiver as well as the injured. In 2000, it was estimated that injuries in the United States cost more than \$406 billion a year in medical costs and lost productivity.<sup>1</sup>

Over a five year period from 2005-2009, Routt County had significantly higher unintentional injury hospitalization rates compared to Colorado in the following categories: (1) motor vehicle non-traffic including the subcategories of motor vehicle occupant and snowmobile, (2) "other crashes" including the subcategories of pedal cyclists and animals being ridden, and (3) falls from skateboards, skis, and snowboards.

In the same time period, Moffat County had significantly higher unintentional hospitalization rates compared to the state in the following categories: (1) motor vehicle non-traffic, (2) animal being ridden, and (3) natural environment including the subcategory of other animal related injury, not being ridden.

Increasing awareness through education is the strategy that will be employed to reduce unintentional injuries in Routt and Moffat Counties.

Source:

1. CDC. Saving lives and protecting people from injury and violence. Retrieved May 2012 from <a href="http://www.cdc.gov/injury/overview/">http://www.cdc.gov/injury/overview/</a>

Strategy	Increase awareness of unintentional injuries in Routt and Moffat Counties
Five year goal	Increase awareness of unintentional injuries through education
Objectives	<ul> <li>Seek funding for unintentional injury awareness campaign</li> </ul>
Action steps	<ul> <li>Develop a resource library of brochures and flyers by injury type</li> <li>Distribute brochures and flyers through primary care settings in Routt and Moffat</li> </ul>
Organization(s) responsible	NWCOVNA

### **Mental Health**

Depression is a debilitating condition and is associated with increased work absenteeism, short-term disability, and decreased productivity. Depression can hinder the course and outcome of chronic medical conditions. According to CDC, 1 in 10 people currently have depression in the United States. It is estimated that 6.6% of the population currently suffers from depression in Colorado. Of the 6.6%, 3.4% meet criteria for major depression and 3.2% have fewer symptoms than major depression but still meet criteria for non-specified depression or dysthymia.<sup>1</sup>

Although the local prevalence is unknown, depression is thought to be a common condition. Interviews with community stakeholders indicate that mental illness and substance abuse are common community health concerns in both counties. The increased prevalence of depression can also be inferred from county-level suicide rates that are significantly higher than the overall state rate.

In 2010 suicide was the 7<sup>th</sup> leading cause of death in Colorado. The highest suicide rate occurred among those 45 to 54 years old. Suicide was the second leading cause of death among ages 10 to 34.<sup>2</sup> In 2010 the crude suicide rate for all ages was higher in Routt County (46.8) and Moffat County (43.5) compared to Colorado overall (17.2).<sup>3</sup> The U.S. Preventive Services Task Force recommends that health-care providers screen adults for depression when programs are in place to ensure accurate diagnosis, effective treatment, careful monitoring, and follow-up.<sup>4</sup>

At a local level, two strategies will be employed to address mental health. Similar to U.S. Preventive Services Task Force recommendations, the first includes implementation of an integrated behavioral health program where patients are screened for depression in primary care offices and case managers follow the care of those who screen positive. The second strategy is a marketing campaign aimed at increasing suicide awareness.

The Northwest Colorado Community Health Partnership (NCCHP) will implement the strategies to combat local mental health issues. Specifically the integrated behavioral health program will be implemented in Routt County and funding will be sought to sustain the current program in Moffat County at the Community Health Center. Additionally, NCCHP will conduct a suicide awareness campaign in both counties. NCCHP is a collaboration of health and human service agencies working to build a sustainable, regional network of care for low income and uninsured residents.

#### Sources:

- 1. CDC. Current depression among adults United States, 2006 and 2008. (2010) *Morbidity and Mortality Weekly Report (MMWR), 59*,(38) pp. 1229-1235.
- 2. Office of Suicide Prevention. Suicide prevention in Colorado annual report 2010-2011. Available at <a href="http://www.cdphe.state.co.us/pp/suicide/2011-11-01-Legislative%20Report-FINAL.pdf">http://www.cdphe.state.co.us/pp/suicide/2011-11-01-Legislative%20Report-FINAL.pdf</a>
- 3. Retrieved June 11, 2012 from http://www.state.co.us/cohid
- 4. CDC. An estimated 1 in 10 U.S. adults report depression. Retrieved June 2012 from http://www.cdc.gov/Features/dsDepression/

Strategy	Implement an Integrated Behavioral Health Program in Routt County and sustain the one in Moffat County
Five year goals	<ul> <li>Reduce barriers to treatment created by social stigmas associated with seeking mental health treatment</li> <li>Increase awareness of mental health issues</li> <li>Reduce suicide rates in Routt and Moffat Counties</li> </ul>
Objectives	<ul> <li>By April 1, 2014, 80% of patients seen annually in primary care offices will get screened for depression</li> <li>By April 1, 2014, 90% of those patients who screen positive will get treatment in a primary setting and/or get a referral for mental health treatment</li> <li>Develop an advertising and social marketing campaign to increase depression and suicide awareness</li> </ul>
Action steps	<ul> <li>Integrated behavioral health program</li> <li>Routt: Obtain funding for a community case manager by March 1, 2012</li> <li>Routt: Hire a community case manager by April 1, 2012</li> <li>Routt: Develop workflows in primary care settings to screen and refer patients by July 1, 2012</li> <li>Routt: Develop methods for calculating rates of referrals and screenings, including baseline</li> <li>Moffat: Seek funding to sustain the integrated behavioral health program at community health center</li> <li>Suicide awareness campaign</li> <li>Identify ad council print ads (free) to run in the local newspapers by 8/1/2012</li> <li>Create one print advertisement (paid) to run in local newspapers by 8/1/2012</li> <li>Create and start a social marketing campaign by 8/1/2012</li> </ul>
Organization(s) responsible	Northwest Colorado Community Health Partnership

### **Environmental Health**

Conducting a community health assessment is one of the core public health services and environmental health indicators are an essential component of this effort. The ongoing monitoring of air and water quality is an important aspect of any program to protect and maintain these environmental resources. This information helps local decision makers and the public to ensure that air and water quality resources comply with state and federal air quality and water quality standards that have been established to protect public health. Establishing the capacity to capture baseline air and water quality data is a top priority in Routt County.

Strategy	Increase capacity to obtain baseline air and water quality data in Routt County
Five year goals	<ul> <li>Obtain equipment and operational funding for monitoring equipment for ozone and particulate matter PM-10, PM 2.5</li> <li>Provide public access to air monitoring results via Routt County website</li> <li>Continue surface and implement new groundwater water quality monitoring program with local stakeholders and United States Geological Survey</li> <li>Provide data and trend reports to the public via website and public meetings</li> </ul>
Objectives	<ul> <li>Confirm compliance with National Ambient Air Quality Standards (NAAQS)for Ozone and Particulate Matter</li> <li>Obtain air monitoring equipment</li> <li>Establish and Maintain Water Quality Monitoring Program through USGS</li> <li>Provide public access to air and water quality data via Routt County web site and USGS.gov</li> </ul>
Action steps	<ul> <li>a. Investigate potential funding sources through (grants/ loans) through public and private sources and Routt County budget process</li> <li>b. Ensure that new Routt County website can accommodate real time data</li> <li>c. Work to secure funding from stakeholders to implement Upper Yampa Water (surface) Monitoring Program</li> <li>d. Implement groundwater monitoring program to track potential changes to WQ</li> </ul>
Organization(s) responsible	<ul> <li>Routt County Department of Environmental Health (a)</li> <li>Routt County/ Department of Environmental Health/ Routt County Information services (b)</li> <li>Routt County/ BCC (c)</li> <li>Routt County Government, local stakeholders(d)</li> </ul>

# System-wide Coordination to Accomplish Colorado's Public Health Improvement Plan

The 2012-2016 Community Health Improvement Plan for Routt and Moffat Counties is a roadmap for improving public health in several key priority areas across the two counties. The plan follows the Colorado Health Assessment and Planning System (CHAPS) created by the Office of Planning and Partnerships at CDPHE and aligns with the assessment and planning goal of the statewide health improvement plan.

In accordance with *Colorado's Public Health Improvement Plan – from Act to Action,* NWCOVNA and Routt County Department of Environmental Health provide residents of Routt and Moffat County with access to core public health services as outlined by CDPHE.

### Financial Plan to meet Public Health needs, Core Services Provision

Northwest Colorado Visiting Nurse Association continually seeks ways to develop and sustain funding sources for core public health services and innovative programming. The advent of the Affordable Care Act and mandated coverage of preventive services also provides opportunity for sustainable funding. NWCOVNA continues to build expertise in billing for services such as immunizations, well-woman exams, and birth control counseling and supplies. Additionally, the agency strives to develop systems to ensure that patients who are eligible for publicly funded insurance are given every opportunity to avail themselves of those benefits, thereby maximizing the potential for reimbursement.

As a means of developing sustainability, NWCOVNA also aims to align its prevention, outreach, education, and care coordination services with current payment reform activities. Prevention can play a vital role in improving value in health care. As such, NWCOVNA continuously seeks funding and resources to expand its ability to evaluate programs, document successes, and demonstrate return on investment.

As a multi-faceted agency that encompasses a wide variety of programs and services, NWCOVNA is also in pursuit of clinically appropriate methods of program and service integration. To that end, the agency has applied for and received funding from the Caring for Colorado Foundation and will embark on a year of research and planning to build a comprehensive, integrated organization that can meet the public health needs and funding challenges of the future. This effort is aligned with the goals of the Institute for Healthcare Improvement's "Triple Aim": to improve the patient experience of care, to improve the health of populations, and to reduce the per capita cost of health care. The challenge before us is to work within the requirements of a myriad of state and federal programs and find permissible and practical ways to create sustainable, scalable, and integrated programs that can best serve the needs of individuals and the community.